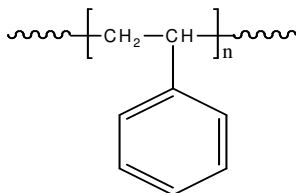


Sample Name: Polystyrene

Sample #: P19830-S

**Structure:**

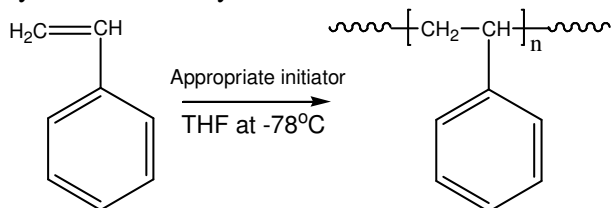


**Composition:**

Mn x 10 <sup>3</sup>	PDI
15.5	1.08

**Synthesis Procedure:**

Polystyrene is obtained by living anionic polymerization of styrene as illustrated below:



**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

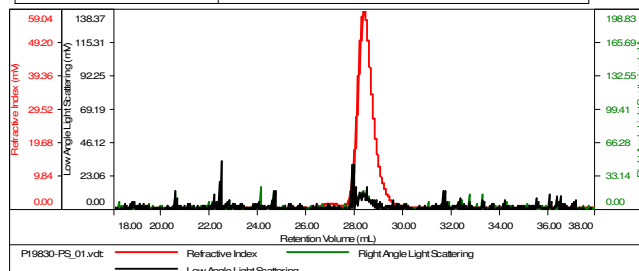
**Solubility:**

Polystyrene is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

SEC elugram of the polymer: run in DMF

**Sample ID:** P19830-PS

Concentration (mg/mL)	0.1452
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-March2016-0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Rh (nm)	Ret Vol (mL)
P19830-PS_01.vcl	15,553	16,749	1.077	1.0000	8.32	28.367